

In the claims:

Cancel claims 1-18 without prejudice.

19. (New) A pipe, comprising a spiral for checking and/or repair of a wall, said spiral having a helical lead selected so that it does not exceed crack critical length of a pipe with a weld.

20. (New) A pipe as defined in claim 19, wherein at least one additional spiral is provided and has a similar direction as said first mentioned spiral.

21. (New) A pipe as defined in claim 19, wherein said spiral is formed in a wall in form of a groove filled with vitreous mass.

22. (New) A pipe as defined in claim 19, wherein said spiral is formed in a wall in form of a convex layer of vitreous mass.

23. (New) A method of pipeline checking, comprising the steps of checking a pipeline with a spiral; registering characteristics of a wall and its defects by means of a conductive spiral arranged in the wall; and

selecting a helical lead of the conductive spiral so that it does not exceed a crack critical length of a welded pipeline.

24. (New) A method as defined in claim 23; and further comprising providing at least one additional conductor spiral in a same direction as said first mentioned spiral on the pipeline wall.

25. (New) A method as defined in claim 23; and further comprising forming the conductive spiral by knurling in form of a groove filled with vitreous mass.

26. (New) A method as defined in claim 23; and further comprising arranging the conductive spiral on the wall in form of a convex layer of vitreous mass.

27. (New) A method as defined in claim 23; and further comprising determining a distance to a defect by a product of a pipeline length and a relation of measuring pulses traveling before and after defect appearance.

28. (New) A method as defined in claim 23; and further comprising forming layers of varying deformability; and determining a period of pipeline failure by calculation on a basis of deformability of the layers and a wall, and a time of layers destruction.

29. (New) A method of pipeline repair, comprising the steps of reducing a pressure in a pipeline cavity; restoring a defective wall of the pipeline; forming at least one spiral in the pipeline with a spiral helical lead selected not to exceed a crack critical length of a welded pipeline; examining the spiral for determining a defect in a pipeline wall; by changes in measuring pulse vibrations reducing a pressure in a pipeline cavity; and restoring a defective wall by heat of vibrations transmitted by the conductive spiral into a crack opening.

30. A method as defined in claim 29; and further comprising arranging at least one additional conductive spiral on the pipe wall in a same direction as the first mentioned spiral.

31. A method as defined in claim 29; and further comprising forming the conductive spiral by knurling in form of a groove which is filled with vitreous mass.

32. A method as defined in claim 19; and further comprising arranging the conductive spiral on a wall in form of a convex layer of vitreous mass.

33. A method as defined in claim 29; and further comprising regulating a heat flow into the crack opening by a power of transmitted vibrations.

34. A method as defined in claim 33; and further comprising increasing a power of the transmitted vibrations in stages.

35. A device for realizing a method of claim 29, comprising a sensor and a monitor, series-connected power unit, DC-to-AC voltage convertor, radiator an optoelectronic couple which is connected with the sensor in form of a fiber-optic line and with a first inlet of the monitor, wherein a second inlet of the monitor is connected to an outlet of the DC-to-AC convertor, wherein the fiber-optic line is formed as a layer of vitreous mass formed at least by a section of one conductive spiral on the pipeline, and a distance between neighboring turns of the spiral is selected not to exceed a crack critical length of the welded pipeline.

36. A device as defined in claim 35, wherein the radiator of the optoelectronic couple is formed as a laser.